

# EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 62154607  
 PUBLICATION DATE : 09-07-87

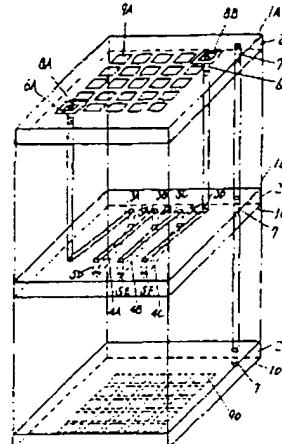
APPLICATION DATE : 26-12-85  
 APPLICATION NUMBER : 60293804

APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

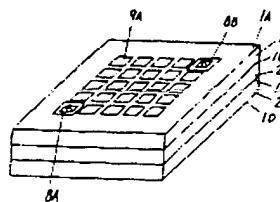
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INT.CL. : H01F 15/04 H05K 1/16 H05K 3/46

TITLE : HIGH FREQUENCY COIL



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ABSTRACT : PURPOSE: To form a high frequency coil with extremely thin electromagnetic shielding function by utilizing a multilayer circuit substrate by forming a solenoid type coil having a rectangular section in the substrate, forming the conductors of the shielding layer in a mesh state to dispose electromagnetic shielding conductors near the coil.

CONSTITUTION: Since a main magnetic flux generated by a current flowing to a thin solenoid type coil is enclosed in an insulating layer between a second conductor layer 1B and a third conductor layer 1C and an insulating layer portion near the layer by forming the coil in a multilayer circuit substrate, the coil is hardly affected strongly by the influence even if an electromagnetic shielding conductor layer is disposed near the coil. A parasitic capacity between coils is reduced without weakening a shielding effect by forming the shielding conductor layer in a meshlike state to prevent the self-resonance frequency of the coil from decreasing, thereby obtaining a high frequency coil treated with a thin electronic shield.

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